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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,622	02/20/2004	Toshikazu Kanaoka	1504.1025	4122

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EXAMINER	
RIVERO, MINERVA	

ART UNIT	PAPER NUMBER
2627	

DATE MAILED: 12/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/781,622	KANAOKA, TOSHIKAZU	
	Examiner	Art Unit	
	Minerva Rivero	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 February 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 6-15* is/are rejected.

7)☒ Claim(s) *2-5* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *20 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Allowable Subject Matter

2. Claim 2, and dependent claims 3-5, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

3. Regarding claim 2, no reference alone or in combination discloses the plurality of grooves comprise a first groove, a second groove adjacent to the first groove, and a third groove adjacent to the second groove, the plurality of individual address data recording portions of these grooves comprising three individual address data recording portions,

wherein in the first groove, one of the three individual address data recording portions stores address data of the first groove,

wherein in the second groove, one of the three individual address data recording portions stores the address data of the first groove, and another individual address data recording portion stores address data of the second groove;

wherein in the third groove, one of the three individual address data recording portion stores the address data of the second groove, and another individual address data recording portion stores address data of the third groove,

wherein the individual address data recording portion of the first groove that stores the address data of the first groove is adjacent radially of the disk to the individual address data recording portion of the second groove that stores the address data of the first groove, and

wherein the individual address data recording portion of the second groove that stores the address data of the second groove is adjacent radially of the disk to the individual address data recording portion of the third groove that stores the address data of the second groove.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1 and 6-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Mochizuki *et al.* (US 6,538,965), hereinafter Mochizuki.

6. Regarding claim 1, Mochizuki discloses an optical disk comprising:

a recording area divided into a plurality of annular bands, each band being circumferentially divided into a plurality of sectors (Col. 9, Lines 4-5);

a plurality of grooves provided in each sector and serving as data-recording tracks (Col. 8, Lines 55-60); and

a plurality of lands provided in said each sector and serving as data-recording tracks, the lands alternating with the grooves radially of the disk (Col. 8, Lines 55-60);

wherein each groove comprises an address region in which data is recorded by in-phase double wobbles, the address region including an address selection data recording portion and a plurality of individual address data recording portions arranged along said each groove, the address selection data recording portion storing data to select one of the individual address data recording portions for reading individual address data from the selected portion (Col. 3, Line 62 – Col. 4, Line 6; Col. 12, Lines 23-29).

7. Regarding claim 6, Mochizuki discloses wherein the address region of each groove includes a common address data recording portion for storing frame data and

band data, while the individual address data recording portions store track data of said each groove (*zone and block address*, Col. 12, Lines 23-29, see Fig. 6).

8. Regarding claim 7, Mochizuki discloses an optical disk comprising:

a recording area divided into a plurality of annular bands, each band being circumferentially divided into a plurality of sectors (Col. 9, Lines 4-5); and

a plurality of grooves provided in each sector and serving as data-recording tracks (Col. 8, Lines 55-60);

wherein each groove includes an address region in which data is recorded by in-phase wobbles, the address region being divided into a first address data recording portion and a second address data recording portion (Col. 12, Lines 23-29, see Fig. 6),

wherein in a selected groove, a sync pattern and address data of the selected groove are recorded in the first address data recording portion (Col. 12, Lines 23-29);

wherein in another groove adjacent to the selected groove, a sync pattern and address data of said another groove are recorded in the second address data recording portion (see Figs. 2 and 6);

wherein the sync patterns of the grooves have a same phase (Col. 12, Lines 23-29).

9. Regarding claim 8, Mochizuki discloses the first address data recording portion records individual address data and common address data recording portion records individual address data and common address data, the individual address data

including track data, the common address data including frame data and band data, and wherein the second address data recording portion records individual address data including track data (*zone and block address*, Col. 12, Lines 23-29, see Fig. 6).

10. Regarding claims 9-10 and 13, Mochizuki discloses a method of reading data from an optical disk by using a radial push-pull technique (Col. 12, Lines 48-55), the method comprising the steps of:

passing a beam along a groove (Col. 1, Lines 28-36);

detecting address selection data recorded in the address selection data recording portion of the groove (Col. 1, Lines 28-36); and

selecting one of the plurality of individual address data recording portions in accordance with the detected address selection data (Col. 1, Lines 28-36).

11. Regarding claims 11 and 12, Mochizuki discloses an optical disk drive and a method of reading data from an optical disk by using a radial push-pull technique, the method comprising the steps of:

passing a beam along a land (Col. 12, Lines 36-38);

detecting a double-wobbled resync pattern formed on the land, the resync pattern resulting from a combination of resync patterns of two adjacent grooves flanking the land (Col. 1, Lines 28-36);

outputting a trigger signal in accordance with the detected resync pattern (Col. 3, Line 62 – Col. 4, Line 6; Col. 12, Lines 23-29);

and

detecting an in-phase double-wobbled individual address data of the land in accordance with the trigger signal, the individual address data resulting from a combination of in-phase double wobbles formed in the two adjacent grooves (Col. 3, Line 62 – Col. 4, Line 6; Col. 12, Lines 23-29).

12. Regarding claims 14, Mochizuki discloses the first detection signal is opposite in phase to the second detection signal (Col. 8, Lines 36-39).

13. Regarding claim 15, Mochizuki discloses an optical disk drive for reading address data from an optical disk by using a radial push-pull technique, the drive comprising:

an optical head for passing a beam along a groove of the disk, the beam having a diameter greater than a width of said groove (Col. 12, Lines 36-38);

a signal generator for generating a first detection signal and a second detection signal, the first detection signal resulting from a sync pattern formed in said groove, the second detection signal resulting from sync patterns formed in adjacent grooves flanking said groove (Col. 1, Lines 28-36); and

an address detector for detecting address data recorded in said groove based on the first detection signal (Col. 3, Line 62 – Col. 4, Line 6; Col. 12, Lines 23-29).

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Van Den Enden (US 6,452,897) discloses an optical disc and apparatus for scanning the optical disc.

Nagasawa *et al.* (US 5,754,506) disclose an optical disk drive and optical disk having address pits for sectors in land and groove tracks.

Kawashima *et al.* (US 2002/0006084) disclose an optical disc wherein addresses are represented in two formats.

Spruit *et al.* (US 7,054,245) disclose a record carrier wherein crosstalk is reduced.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minerva Rivero whose telephone number is (571) 272-7626. The examiner can normally be reached on Monday-Friday 9:00 am - 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on (571) 272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MR 12/07/06

WAYNE YOUNG
SUPERVISORY PATENT EXAMINER